## INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2003/001676

| A. CLASSIFICATION OF SUBJECT MATTER  |  |  |                           |
|--|--|--|---------------------------|
| IPC7 G02B 1/10,  |  |  |                           |
| According to International Patent Classification (IPC) or to both national classification and IPC  |  |  |                           |
| B. FIELDS SEARCHED   |  |  |                           |
| Minimum documentation searched (classification system followed by classification symbols)  |  |  |                           |
| IPC7 G02B 1/10, 1/00, C09J 7/02, C09K 3/18, B32B 7/02  |  |  |                           |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  |  |  |                           |
| Korean Patent and Applications for Inventions since 1947  Korean Utility Models and Applications for Utility MOdels since 1947                                       |  |  |                           |
|  |  |  |                           |
| Electronic data base consulted during the intertnational search (name of data base and, where practicable, search terms used)  eKIPASS                               |  |  |                           |
|  |  |  |                           |
| C. DOCUMENTS CONSIDERED TO BE RELEVANT   |  |  |                           |
| <del> </del>   |  |  | Delements delem No        |
| Category*  | Citation of document, with indication, where app               | propriate, of the relevant passages  | Relevant to claim No.     |
| 37   | KR 2000-52022 A (Byungsoon Kim) 16 Aug.2000                    |  | 1-5                       |
| X<br>A   | see abstract, example 1 and example 3 see the whole document   |  | 6-8                       |
|  | US 2002/176988 A1 (Paul A. Medwick, et al.) 28 No              | w 2002   |                           |
| x  | see abstract, claims, phrases [0002]-[0011] and phras          |  | 1-5                       |
| A  | see the whole document   |  | 6-8                       |
|  | US 5116665 A (L'air Liquide, Societe Anonyme pour) 26 May 1992 |  |                           |
| A  | see the whole document   |  | 1-8                       |
|  | US 4701962 A (Eye Pro, Inc.) 27 Oct. 1987                      |  |                           |
| A  | see the whole document   |  | 1-8                       |
|  | US 5970515 A (Brebda B. Fishbaugh) 26 Oct. 1999                |  | 1-8                       |
| A  | see the whole document   |  | 1-6                       |
|  |  |  |                           |
|  | ·  |  |                           |
|  |  |  |                           |
| Further documents are listed in the continuation of Box C.  See patent family annex.   |  |  | ·                         |
| * Special categories of cited documents:  "T" later document published after the international filing date or priority   |  |  |                           |
| "A" document defining the general state of the art which is not considered to be of particular relevance the principle or theory underlying the invention            |  |  | n but cited to understand |
| "E" earlier application or patent but published on or after the international  |  | "X" document of particular relevance; the claimed invention cannot be  |                           |
| filing date  "L" document which may throw doubts on priority claim(s) or which is  |  | considered novel or cannot be considered to involve an inventive<br>step when the document is taken alone                          |                           |
|  |  | "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is |                           |
| "O" document referring to an oral disclosure, use, exhibition or other   |  | combined with one or more other such documents, such combination   |                           |
| means being obvious to a person skilled in the art document published prior to the international filing date but later "&" document member of the same patent family |  | ,  |                           |
| than the priority date claimed   |  |  |                           |
|  |  | Date of mailing of the international search report   |                           |
| 14 MAY 2004 (14.05.2004)   |  | 14 MAY 2004 (14.05.2004)   |                           |
| Name and mailing address of the ISA/KR  Korean Intellectual Property Office  |  | Authorized officer   | Alpen                     |
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